



# An analysis of the determinants of cruise traffic: An empirical application to the Spanish port system



José I. Castillo-Manzano<sup>a</sup>, Xavier Fageda<sup>b,\*</sup>, Fernando Gonzalez-Laxe<sup>c</sup>

<sup>a</sup> Applied Economics & Management Research Group, University of Seville, Spain

<sup>b</sup> Department of Economic Policy, University of Barcelona, Spain

<sup>c</sup> Department of Applied Economics, University of Coruña, Spain

## ARTICLE INFO

### Article history:

Received 14 August 2013

Received in revised form 12 March 2014

Accepted 26 March 2014

### Keywords:

Cruise traffic

Spanish port system

Microeconometrics

Panel data

Port management

## ABSTRACT

We study the determinants that affect the capacity of ports to attract cruise ships in Spain. The conclusion is that the likelihood of having cruise traffic is linked to ports located in populous areas and close to large airports, ports not specialized in container traffic but sharing facilities with ferries traffic and ports having a minimum depth of water. The amount of cruise traffic that a port can generate is also related to the population and the air connections, along with the tourist appeal and the facilities shared with other types of port traffic, namely roll-on roll-off and ferries.

© 2014 Elsevier Ltd. All rights reserved.

## 1. Introduction

Cruises have become one of the most dynamic and fastest expanding segments of the international tourist industry regarding both cruise passenger demand (Sun et al., 2011) and the growing supply of vessels, and larger size vessels (see Weaver, 2005a, 2005b, on the trend towards super-sized cruise ships) which, with their greater ranges of cuisine and leisure are trying to respond to the increasingly complex demands and motivations of both first-time and returning passengers (see Jones, 2011).

According to Soriani et al. (2009), the cruise industry continues to be a dynamic sector, in continuous growth, and an increasingly important component of the global tourism industry. The total number of cruise passengers can be seen to have increased from half a million in 1970 (see Krause, 1980, for an analysis of the industry during its modern-day resurgence) to over 20.3 million in 2012 (according to CLIA estimates, 2013) with a figure of 25 million predicted for 2015 (WTO, 2010), although for Cruise Market Watch (2013) the economic crisis means that predictions for said year stand at around 22.5 million. There is no doubt that the crisis is turning into the main threat to the sector, especially in areas like the Mediterranean, and that it could cut short the excellent expectations with which the 21st century began in the wake of almost unbroken growth for almost three decades (Wild and Dearing, 2000).

All types of factors have influenced this expansion, from the early success of the Love Boat TV series (Weaver, 2005a) to national promotion and sales campaigns that range from early bookings with a minimal booking fee to last-minute sales, especially on the Internet. It is not hard to find cruises that cost way below traditional prices in the sector, some even at

\* Corresponding author. Address: Department of Economic Policy, University of Barcelona, Av. Diagonal, 690, 08034 Barcelona, Spain. Tel.: +34 934039721.

E-mail addresses: [jignacio@us.es](mailto:jignacio@us.es) (J.I. Castillo-Manzano), [xfageda@ub.edu](mailto:xfageda@ub.edu) (X. Fageda), [laxe@udc.es](mailto:laxe@udc.es) (F. Gonzalez-Laxe).

under 500€ per person on the Internet, including port authority charges. In fact, extreme cases can be found among the last-minute offers where the revenue from last minute fares is far below the cost of the services provided.

As cruises have become more common, they have stopped being a local phenomenon confined mainly to the Caribbean (see [Petit-Charles and Marques, 2012](#), on the importance of cruises in the Caribbean and [Wanhill, 1982](#), on their economic impact at ports of call since the end of the nineteen-seventies) and they have spread throughout a number of geographical areas all round the world, from Alaska (see [Mak, 2008](#)) to Asia (see [Rodrigue and Notteboom, 2013](#)). This great geographical expansion worldwide has also led to a rise in the desire of port authorities and tourist organizations to tempt them to new ports (see for example [Jordan, 2013](#) on the expectations of Port of Spain in Trinidad and Tobago to be considered a Cruise Hub in the Caribbean given its geographical location).

Of the other geographical areas to which cruise tourism has spread, the Mediterranean stands out as the second biggest market with a 24% world market share. According to [Soriani et al. \(2009\)](#), the reasons that would justify this success include the following: easier navigation than in other geographical areas, as the Mediterranean is an almost completely enclosed basin and thus sheltered from strong oceanic streams; a good climate, which makes it possible to plan navigation over 8 months of the year, or even longer in the southern regions; the area offers diverse environments (a variety of coastal environments, islands and archipelagos) as well as unique cultural–historical attractions (towns, archaeological sites, etc.). The variety of destinations on offer in the Mediterranean is so wide-ranging and eclectic that it provides the opportunity to visit places ranging from the ruins of the main civilizations of antiquity (such as Egypt or all those of the Greco-Roman tradition) at one extreme, to the Holy Lands and the jewels of the Italian renaissance, and to Ibiza, the global capital of techno music with its never-ending parties, at the other (see [Ettema and Schwanen, 2012](#), on this kind of tourism).

Italy stands out as the country with the highest number of cruise passengers in this area due both to the beauty of its destinations and also because of its role as a pivotal divide that splits the Mediterranean market into two distinct segments, one to the west and the other to the east. The Spanish port system stands out after Italy, with Barcelona as its standard bearer and the port that currently boasts the greatest amount of cruise passenger traffic; to be specific, in 2011 2.6 million cruise passengers passed through the port. It is therefore not surprising that two Spanish ports, namely Barcelona and Malaga, are rivaling Nice and Marseilles as the venue for the Seatrade Med international meeting ([Government of Andalusian, 2012](#)), an event which endeavors to replicate the functionality of Seatrade Miami in the Mediterranean geographical area.

Despite the importance of the sector and the increasing amount of literature that analyzes the main features and trends of cruise traffic (see [Rodrigue and Notteboom, 2013](#), or [Weeden et al., 2011](#)), there is a clear lack of literature on empirical analyses that analyze the main determinants of the evolution of cruise traffic (see [Papathanassis and Beckmann, 2011](#), or [Gibson, 2008](#), on the lack of literature on cruises). In fact, there is nothing similar to this study in the prior literature, although some studies were found that seek to formulate hypotheses on the possible determinants of cruise traffic. These hypotheses were formulated from a synthesis of experts' opinions ([Lekakou et al., 2009](#); [Vaggelas and Pallis, 2010](#) and [Wang et al., 2014](#)); from the results of surveys to gauge the satisfaction of cruise passengers ([Silvestre et al., 2008](#)) or simply from observations of trends in the sector ([Marti, 1990](#); [Soriani et al., 2009](#); [Rodrigue and Notteboom, 2013](#)). Some first attempts of regressions have been made in recent years to find these determinants although, unfortunately, still with a very limited number of explanatory variables. For example, [Petit-Charles and Marques \(2012\)](#) attempted to explain cruise supply with two explanatory variables, namely excursions revenue and distance between the port of call and the port of embarkation. Meanwhile, [Lee and Ramdeen \(2013\)](#) tried to explain the vessel occupation rate using dummy variables for the various ship itineraries.

Among these precedents, [Marti \(1990\)](#), after a descriptive analysis of the sector, concludes by stressing the importance of geographical factors, specifically 'site' and 'situation', for determining the port selection process in the cruise industry. [Petit-Charles and Marques \(2012\)](#) also stress the importance of the situation. The tourist appeal of the port's hinterland and, especially, its ability to generate profits through excursions, also has many supporters (see [Petit-Charles and Marques, 2012](#); [Silvestre et al., 2008](#); [Soriani et al., 2009](#) and [Wang et al., 2014](#)). There also seems to be a degree of theoretical consensus regarding how important it is for a port to have infrastructure good links with road networks and airports especially (see [Vaggelas and Pallis, 2010](#); [Lekakou et al., 2009](#); [Soriani et al., 2009](#); [Rodrigue and Notteboom, 2013](#); and [Wang et al., 2014](#)). Finally, some of these papers stress the importance of the port's technical features, including depth of waters and the economic efficiency of its services and operatives (see [Vaggelas and Pallis, 2010](#); [Lekakou et al., 2009](#); [Soriani et al., 2009](#); or [Wang et al., 2014](#)).

This lack of literature and of methodologically-supported studies must be due to the fact that this is a sector where the factors that define the demand and those that define the supply are quite complex (see [Weeden et al., 2011](#)). However, it is due above all to the difficulty of constructing large-scale databases with a port set with cruise traffic or the potential to acquire it. Also, unlike international sea transport, and except for the under-developed Short Sea Shipping (see [Puckett et al., 2011](#); [Douet and Cappuccilli, 2011](#); [Suárez-Alemán et al., 2013](#) and [Medda and Trujillo, 2010](#), on the development and main trends of SSS) its nature as a complement might take priority over its nature as a substitute for cruise traffic between ports in close proximity as, following [Rodrigue and Notteboom \(2013\)](#), the objective of the cruise shipping companies is to design a good sequence of ports that define an attractive and competitive itinerary, where one stopover is located just a few hours sailing away from the preceding port.

In this context, our first objective is to present the first data panel estimate of the determinants that both positively and negatively influence the likelihood that a port is able to have cruise traffic. Subsequently, a new second phase panel data estimation of ports with cruise traffic seeks to determine the explanatory variables that impact on the overall number of cruise traffic that a port is able to achieve. For this second estimate only the ports with effective cruise traffic will be taken

Download English Version:

<https://daneshyari.com/en/article/7428168>

Download Persian Version:

<https://daneshyari.com/article/7428168>

[Daneshyari.com](https://daneshyari.com)