



ELSEVIER

Contents lists available at ScienceDirect

Journal of Destination Marketing & Management

journal homepage: www.elsevier.com/locate/jdmm

Research Paper

A comparative analysis of tourism destination demand in Portugal

Jaime Serra ^{a,*}, Antónia Correia ^b, Paulo M.M. Rodrigues ^c^a Center for Advanced Studies in Management and Economics (CEFAGE-UE), Universidade de Évora, Évora, Portugal^b Center for Advanced Studies in Management and Economics (CEFAGE-UE), Universidade do Algarve, Faro, Portugal^c Banco de Portugal, Universidade Nova de Lisboa, Center for Advanced studies in Management and Economics (CEFAGE-UE), Lisbon, Portugal

ARTICLE INFO

Article history:

Received 21 February 2013

Accepted 14 October 2013

Available online 11 November 2013

Keywords:

Tourism demand
Econometric model
Dynamic panel data
Portugal

ABSTRACT

Tourism has experienced different levels of development in the different regions of Portugal. To frame this development, in this paper dynamic panel data models were estimated with the objective of explaining the evolution of international overnight stays in each region. Secondary data from 2000 to 2011 was used. The analysis includes the main tourism source markets for Portugal, such as the United Kingdom, Germany, the Netherlands, Ireland, France and Spain. The tourism literature suggests that, among others, the main determinants of tourism demand are income (GDP), household consumption, unemployment rate and the harmonised consumer price index. Per capita income, unemployment rate and final household consumption were identified as the most shared explanatory variables in each tourism region. However, in some regions, the high elasticity with respect to per capita income was confirmed, suggesting that tourism is a luxury good. It is observed that, although significant, the explanatory power of these variables varies according to the origin and the destination region considered. Findings suggest heterogeneous behaviour of the main international tourism demand by region. Furthermore, results also suggest some implications for public and private tourism authorities. Stakeholders can update the analysis, trends and forecasts of international tourism demand, put forward in the National Strategic Plan for Tourism for the period from 2013 to 2015, by taking into account the different macroeconomic variables that help explain international overnight stays in each region of Portugal.

© 2013 Elsevier Ltd. All rights reserved.

1. Introduction

Tourism is an important social and economic phenomenon that follows a pattern of evolution which is important to understand. Applied economic research attempts to understand this pattern from an applied macroeconom(etr)ic, an applied microeconom(etr)ic, or even a mixed (micro- and macroeconom(etr)ic) perspective. The macroeconom(etr)ic perspective considers that tourism demand patterns are explained by economic and social conditions at an aggregate level (see, *inter alia*, Garín-Muñoz, 2006; Garín-Munõz & Amaral, 2000; Sakai, Brown, & Mak, 2000; Santana-Galleno, Ledesma-Rodríguez, & Pérez-Rodríguez, 2011; Seetanah, 2011), whereas microeconom(etr)ic approaches focus on variables at the individual level (see Brida & Risso, 2009; Massidda & Etzo, 2012; Surugiu, Leitão, & Surugiu, 2011). A mixed (micro and macroeconom(etr)ic) perspective has recently emerged; see, *inter alia*, Eugenio-Martín, Morales, and Scarpa

(2004), Eugenio-Martín, Martín-Morales, and Sinclair (2008), Garín-Muñoz and Montero-Martin (2007), Leitão (2010), Naudé and Saayman (2005), Yang (2012), Yang, Lin, and Han (2010). However, there has been no clear-cut answer explaining the heterogeneous evolution of tourism demand, which therefore requires further research.

The traditional econometric approach typically used in the literature relies on ordinary least square (OLS) regression analysis. However, over recent years other econometric methods, such as, for instance, autoregressive distributed lag (ADL) models, error correction models (ECM), time varying parameter (TVP) models and almost ideal demand systems (AIDS) have been considered; see Song and Li (2008).

Panel data models have had less application in tourism analysis (Song & Li, 2008). In this paper, using dynamic panel data models we look to identify and analyse the determinants of international tourism demand for each tourism region of Portugal. In order to clarify our assumptions the UNWTO classification of International Tourism was adopted. According to UNWTO (1997), international tourists are defined as those travellers that cross a country's border. Indeed this criterion separates tourists by nationalities, which is useful for the purpose of our analysis as it allows us to distinguish between domestic and foreign tourists.

* Correspondence to: University of Évora, School of Social Sciences, Largo dos Colegiais, 2, 7004-516 Évora, Portugal. Tel.: +351 266 740 805x3240; mob.: +351 966 361 488.

E-mail addresses: jserra@uevora.pt, serra.jaime@gmail.com (J. Serra), acorreia@ualg.pt (A. Correia), prodrig@novasbe.pt (P.M.M. Rodrigues).

The dynamic panel data models considered are estimated using the Generalized Method of Moments (GMM) approach proposed by [Arellano and Bond \(1991\)](#). Among other features, the use of panel data models presents several advantages. It allows us to control for individual heterogeneity, more variability and less collinearity between variables. Hence, given that the dataset used in the present study is a short panel (short time period and many individuals), ([Cameron & Trivedi, 2010](#)), panel data methods prove useful as they allow for more reliable estimation. The model proposed allows for the identification of the main macroeconomic determinants of demand. Their contribution rests on explaining the volume of overnight stays by the six major international markets in the seven tourism regions of Portugal. Based on the number of overnight stays in hotels, tourist resorts and apartments, over a period of twelve years (2000–2011), we found that macroeconomic variables have a positive or negative impact on current international demand for each tourism region of Portugal.

The rest of the paper is organized as follows. The next section contextualizes the tourism demand pattern in Portugal in terms of international overnight stays between 2000 and 2011. [Section 3](#) summarizes the tourism demand studies mainly concerning the applications of econometric models and in particular panel data models. [Section 4](#) presents the econometric methodology and the data set considered in the present research. The empirical results for each region are provided in [Section 5](#) and [6](#) presents a discussion of the results. Finally [Section 7](#) summarizes and presents the conclusions, limitations and perspectives for future research.

2. Contextual setting

Portugal, in terms of international tourism, received 26 million overnights in 2011, which correspond to 66% of total overnights in Portugal ([Turismo de Portugal, IP, 2012](#)). However, six of the major international tourism source markets, such as the United Kingdom (UK); Germany (GER); the Netherlands (NE), France (FR), Ireland (IR) and Spain (SP) have presented a decreasing trend since 2000 (see [Fig. 1](#)).

Considering the essential role that the tourism sector plays in the national economy (in 2011 tourism consumption in Portugal was 9% of GDP), the analysis of the tourism demand pattern is essential to enact a sustainable development. Although a decreasing trend seems to be observed in all markets, as illustrated in [Fig. 1](#), this tendency is not homogeneous when the focus of analysis is at the regional level. [Table 1](#) shows that the main markets present different demand patterns by region.

While in the Algarve and Lisbon the British market decreased on average 2%, in the Azores Islands this market shows a tendency to increase by around 4%. Concerning the German market a decrease is observed in the Algarve (which registered an average growth of -7%). However, in the Centre, North and Azores Islands this market reveals a tendency to increase, registering average growth rates of 4%, 2% and 9%, respectively. The Dutch market shows a clear average growth in the Azores Islands of around 26%, which represents, in absolute size, an increase from 4.462 overnight stays in 2000 to 55.503 overnight stays in 2011. This behaviour is also observed in the Centre, Alentejo and North ([Turismo de Portugal, IP., 2012](#)). The analysis of the Irish market reveals a tendency to increase in all regions (particularly the Centre) of Portugal with the exception of the Algarve. Specifically, the Centre registered an average growth rate of 31% in the Irish market, which represented an effective growth overnight stays in absolute terms, from 16 in 2000 to 39.348 in 2011 ([Turismo de Portugal, IP., 2012](#)). Concerning the French market an increasing trend in all tourism regions of Portugal is observed. Finally, the Spanish market also shows positive behaviour in every Portuguese

region, although it is important to note that this increase is more evident in the Azores Islands (17%), Algarve (12%), Centre (11%), North (7%) and Alentejo (7%). These results suggest that tourism demand needs to be analysed at the regional level to account for specificities of each tourism market.

3. Literature review

Tourism demand refers to the consumers' willingness to buy different amounts of a tourism product at different prices during a period of time ([Dwyer, Forsyth, & Dwyer, 2010](#)). This willingness is constrained by the availability of time and money to spend on vacations. Tourism is a complex decision wherein several determinants contribute to explain tourism demand. [Middleton, Fyall, and Morgan \(2009\)](#) summarize the main determinants in nine factors: economic factors; comparative prices; demographic factors; geographic factors; socio-cultural attitudes to tourism; mobility; government/regulatory; media communications; and information and communication technology. Income factors particularly were used in many empirical studies that adopted econometric models to measure tourism demand elasticities. Findings showed that the income elasticity of tourism demand, especially for international demand, is positive and above one. Typically, economic products with such elasticities are perceived as luxury goods, as posited by [Crouch \(1995\)](#), [Lim \(1997\)](#) and [Smeral \(2012\)](#).

Tourism demand's main determinants support the explanation of why the populations of some countries have a high propensity to participate in tourism, whereas the populations in others show a small propensity to travel ([Vanhove, 2005](#)).

In terms of quantitative methods, [Surugiu et al. \(2011\)](#) indicated that tourism demand has been studied using simple and multivariate regressions; see [Allen and Yap \(2009\)](#), [Garín-Munõz and Amaral \(2000\)](#), [Luzzi and Fluchiger \(2003\)](#). The use of panel data methods presents several advantages. As stated by [Ramos and Rodrigues \(2013\)](#), it allows one to control for individual heterogeneity, to consider more information, more variability, less collinearity between variables; it provides more degrees of freedom and greater efficiency and allows one to study the dynamic adjustment process. It also allows for the identification and measurement of effects that simply are not detected in data that are purely temporal or cross-sectional, and it allows for small samples.

The literature review that follows focuses mainly on studies which have attempted to generate international tourism demand elasticities by using dynamic panel data models. Extending the work of [Song and Li \(2008\)](#) we partially updated their literature review, finding several studies that modelled tourism demand using dynamic panel data models. According to [Song and Li \(2008\)](#) this method has rarely been applied to tourism demand analysis.

Since 2010, most recent studies have tested the relationship between tourist arrivals and GDP, relative prices, distance, population, exchange rate and several dummy variables, which account, among others, for wars, diseases, economic and social crises (see, e.g., [Deng and Athanasopoulos, 2011](#); [Falk, 2010](#); [Görmüs & Göçer, 2010](#); [Ibrahim, 2011](#); [Leitão, 2010, 2011](#); [Massida & Etzo, 2012](#); [Ouerfelli, 2010](#); [Rodríguez and Rivadulla, 2012](#); [Seetannah, 2011](#); [Seetaram, 2012, 2010](#); [Surugiu et al., 2011](#); [Töglhofer, Eigner, & Pretenthaler, 2011](#)). These studies have explored the relationship between the former variables and tourist arrivals. The results available highlight the dynamic nature of tourism demand; see [Seetaram \(2010\)](#). [Seetaram \(2010\)](#) used dynamic panel data cointegration techniques to determine the elasticities of tourism arrivals in Australia. The results show that tourism demand in

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات