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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

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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.

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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).