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Regional public support to airlines and airports: An unsolved puzzle

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This paper proposes a structural model to explain the motivation of regional public authorities to arrange marketing agreements for route and traffic development. Furthermore, using data from Spanish airports, we empirically test this model obtaining the demand function according to the preferences of public authorities. The results show that the public budget, airport's attributes or intermodal competition affect to the demand for aircraft operations of regional public agencies. Finally, we propose an empirical method to determine the market power of airlines within these marketing agreements in a particular airport or route.

1. Introduction

In recent years, some airports have experienced a significant increase in air traffic due to the liberalization in the air transport market. In some cases, this phenomenon has been related to the existence of new transport policy tools which aim to promote the use of airport infrastructure with idle capacity. In this way, an increasing number of regional airports have received the support of their regional governments through financial arrangements with air carriers in order to open new routes, as well as to provide advertising services linked to the permanence of the air carrier at a given airport. Indeed, airport managers have more incentives to negotiate long-term contracts with air carriers in order to reduce the risk of traffic loss for their installations (Gillen, 2011).

In Europe, these types of agreements among regional governments and air carriers have been controversial, especially for those full service carriers (FSCs) which have made a claim to the European Commission, asking for these subsidies to be considered illegal. This has been the case of Charleroi airport and Ryanair (Barbot, 2006). In 2001, the Walloonian government, owner of Charleroi airport, signed an agreement with Ryanair in order to promote the use of the Charleroi facilities. Thus, the airport agreed to give a discount in landing fees and handling charges for a period of 15 years, among other measures, in exchange for Ryanair to commit itself to using Charleroi as an operating base for the same period. Three years later, the European Commission established that reductions in these fees and charges were partially incompatible with the common-market principles concerning state aids. The analysis and decision of the Charleroi–Ryanair case allowed the European Commission to develop guidelines on the financing of airports and start-up aids to airlines departing from regional airports in 2005 (European Commission, 2005). At the end of 2008, the European Court of First Instance annulled the Commission's Decision. In 2014 the Commission adopted new guidelines with the aim of adjusting to the new economic context (European Commission, 2014). In this sense, start-up aid to airlines will only be considered compatible for routes linking an airport with

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less than three million passengers per year and may cover up to 50% of airport charges of a route for a maximum period of three years. Additionally, for those connections which are already operated by a high-speed rail service or by another airport in the same catchment area, such air route will not be eligible for start-up aid.

In Spain, the Comisión Nacional de la Competencia ('*National Competition Commission*') issued a report about the public funds provided by regional public authorities to different airlines, with the aim of increasing the flow of travelers to certain destinations for the period 2007–2011 (CNC, 2011).[1] The analysis focuses specifically on those marketing agreements concluded between public authorities and airlines. In this type of operations, the airline agrees to incorporate advertising for tourism purposes in different channels (on board magazine, webpage or promotional tickets) and also commits to opening new routes or maintaining those already available with origins or destinations in a certain airport. Meanwhile, the public authority agrees to pay for services rendered. As the report remarks, the price of the services included in the instruments used were determined from rates and average costs set by the airlines, although these rates have not been disclosed in the research (CNC, 2011; page 52).

Among the reasons why the CNC considers it relevant to study this type of public assistance are the increasing use of public support for the maintenance of routes at certain airports along with the potential distortion that can be generated in the allocation of productive factors. Finally, the report notes that the regional public authorities have not reported any such public support to the European Commission in any of the cases. This fact could reveal the perception of public agencies that this public support is not considered possible state aid, subject to the state aid general rules and the specific Community Guidelines on state aid to airports and airlines (2005).

The overall volume of public funds for the period 2007–2011 was nearly 250 million euros, concentrated in a few number of airlines. The distribution of public support was also not uniform across Spanish airports. Furthermore, the report showed that airports presented a negative correlation between their ratio of public funds per passenger and their corresponding traffic growth rates. From these results, one might ask how suitable this type of support is. A cost-benefit analysis of this public policy could determine whether the policy followed by numerous governments generates some kind of gains in terms of social welfare. However, this type of analysis is beyond the scope of this work due to its enormous complexity.

The literature related with regional public support to airlines and airports is recent and scarce. Barbot (2006) analyzes the effects of subsidies for secondary airports on competition between low cost and full-scheduled carriers. This study also assesses a case study of the Ryanair–Charleroi airport agreement. The main results are that subsidization provokes a growth in demand, adding new users and a switch of passengers from full-scheduled carriers to low cost airlines. As far as the airport is concerned, the proposed model shows that the airport may benefit more from the arrangement than the subsidized air carrier, depending on its efficiency.

Malina et al. (2012) investigate incentive programs for route and traffic development at the 200 largest European airports in 2010. Two types of airport incentive schemes should be mentioned: *official incentive programs* and *bilateral agreements* between airports or regional authorities on one side and airlines on the other side. They find that the largest airports almost exclusively employ the published incentive programs, whereas small and medium-sized airports use both mechanisms. The authors argue that transaction costs could partially explain these facts. In this sense, larger airports could not bear the costs of negotiating bilateral agreements with different airlines, so the introduction of a dedicated incentive program might reduce these transaction costs. The descriptive study of Malina et al. (2012) do not study specifically the bilateral agreements due to the scarcity of official sources. However, they exemplified the Spanish case regarding the use of bilateral agreements between public authorities and airlines. Other descriptive studies which focus on this topic describe the evidence of German airports (Fichert and Klophaus, 2011), U.S. airports (Wittman, 2014) or European airports (Jones et al., 2013).

Allroggen et al. (2013) investigate determinants for offering incentives for the case of a sample of European airports. In this case, an empirical specification is proposed using a probit instrumental variable model with cross-sectional data. In order to justify the existence of these economic incentives, this paper shows that an airport authority calculates whether introducing incentives is economically viable by using the projected net present value of the incentives for route and traffic development. They demonstrate that airport competition, the importance of service sector, the economic regulation of airports, the existence of low cost traffic, the amount of charges, or the ownership structures have an impact on the presence of these incentives. In their conclusion, the authors point out the relevance of studies that focus on the existence of incentive programs at airports controlled by public entities in the debate on state aid and subsidization of airports within Europe.

Laurino and Beria (2014) discuss the main incentive schemes used by three Italian airports to attract airlines, which are often based on bilateral agreements rather than on transparent incentive programs. They focus on the common difficulties found related to the implementation of such tools and on the effects of these on the airport's financial results. The application of the 2005 EC Guidelines, the role of public entities in determining regional aviation policy or the risk of cannibalization among airports trying to attract airlines are the main topics studied by means of three case studies.

The literature on public service obligations in the air transport market also presents some connections with the different mechanisms of public support to airlines. In the Spanish context, some subsidies are granted to passengers living in the archipelagos of the Canary and Balearic Islands and also from passengers living in the Spanish autonomous cities of Ceuta

[1] In October 2013, the Spanish government created the National Commission on Markets and Competition (CNMC in Spanish) from the merger of five agencies: the National Energy Commission (CNE), the Commission for the Telecommunications Market (CMT), the National Competition Commission (CNC), the National Commission for the Postal Sector and the Railway and Airport Regulatory Commission. The merge of the bodies was justified by the cost savings that this could generate for public finances.