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Hello major airports, goodbye regional airports? Recent changes in European and US low-cost airline airport choice

Frédéric Dobruszkes [a, *], Moshe Givoni [b], Timothy Vowles [c]

[a] Université libre de Bruxelles (ULB), Faculty of Sciences, DGES-IGEAT, Avenue F. D. Roosevelt, 50, CP 130/03, 1050 Brussels, Belgium
[b] Tel-Aviv University, Transport Research Unit, The Department of Geography and the Human Environment P.O.B 39040, Ramat Aviv, Tel Aviv 69978, Israel
[c] University of Northern Colorado, Department of Geography and GIS, Candelaria 2200, Campus Box 115, Greeley, CO 80639, USA

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ABSTRACT

Low-cost carriers (LCCs) are assumed to adopt a certain business model in which an important element is the concentration of services at secondary and regional airports. Yet, evidence suggests that increasingly LCCs also establish themselves in what can be considered the major airports. This raises the question of whether LCCs are changing their business model and adopting practices associated with the traditional, incumbent airlines, and if so what might cause such change. Based on categorization of airports and using OAG flight data the US and European markets are investigated. Focusing on several LCCs, with more attention given to Southwest and Ryanair, their profile of operation with respect to the type of airports used is analysed for a period of between 15 and 25 years and up to 2015. The results clearly indicate that LCCs are increasing their operations from major airports, while generally continuing their growth and expansion strategy. The main implication of which is the increase in direct competition between LCCs and traditional airlines while the impacts of this change on the smaller airports are not clear yet and need to be investigated further.

1. Introduction

In February 2013, Southwest Airlines, the largest and considered the first US low-cost airline (LCC), celebrated its first year of operations from the world's busiest airport, Hartsfield-Jackson Atlanta International Airport, in the context of having taken over AirTran. Southwest then announced new and renewed airline facilities, suggesting it really intended to put down roots at this airport.[1] A similar story occurred on the other side of the Atlantic. In September 2014, the leading LCC, Ryanair, considered the first European LCC announced the launch of nine extra routes from Madrid, thus operating 40 routes from the largest Spanish airport.[2] Adolfo Suárez Madrid–Barajas Airport would thus become the sixth most served by Ryanair (2015 departing seats), while the airline became the third-largest carrier locally (2014 passengers) after Iberia and Air Europa.[3]

These narratives contrast sharply with the general belief that the use of regional and secondary airports is at the core of LCCs' business model and geographical strategy. This gap raises two questions. First, have LCCs actually already served regional and secondary airports less than has been usually believed? Dobruszkes (2013) insists that amongst European LCC networks, there are two dominant models. Ryanair links a myriad of regional airports thus serving many exclusive routes. In contrast, Easyjet serves mainly larger airports, thus competing head-on with incumbent airlines. Because Ryanair's model is geographically atypical, it may have received more attention. Second, does the apparent LCC expansion towards large airports mean such airlines are leaving secondary and regional airports in the context of new business models? This is an important question considering public expenditures supporting the expansion of these airports (new airport facilities, improved land access and state aid offered to airlines).

* Corresponding author.
E-mail addresses: frederic.dobruszkes@ulb.ac.be (F. Dobruszkes), givonim@post.tau.ac.il (M. Givoni), timothy.vowles@unco.edu (T. Vowles).

[1] Southwest Airlines Celebrates One-Year Anniversary of Atlanta Service with Opening of Atlanta People Department; Announcement of Atlanta Pilot Base, press release, February 12, 2013 (retrieved June 17, 2015).

[2] Ryanair's Madrid Summer 2015 Schedule To Deliver 1 m New Customers, press release, September 3, 2014 (retrieved June 17, 2015).

[3] Ryanair growing again in Madrid, its sixth biggest base; over 70 routes launched since 2006 but over 30 dropped, www.anna.aero, May 15, 2015 (retrieved 17 June 2015).

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These two research questions are important in understanding airlines' business models. Indeed, the choice of airports served is a key part of any business model, since it affects network structure, routes' traffic density, operating costs, potential incentives, the level of competition with other airlines and other transport modes, etc. In sum, airport selection can be understood as testimony of the relationship between airlines' strategy and places served in the context of airlines' shareholders intending to yield a profit. They are also important in appreciating new spatial patterns related to the formation of metropolitan areas, which potentially concentrate large amounts of transport demand in or around larger cities.

The remainder of this paper is as follows. Section 2 proposes a state of the art about the airports in the context of LCCs. Section 3 introduces our methods and data used. The results are detailed in Section 4, and discussed in Section 5.

2. The geography of low-cost carriers at the airport level: a brief state of the art

Airports constitute a significant share of the vast literature related to LCCs. The relevant vocabulary is not very stable, since both 'secondary airports' and 'regional airports' are often indistinctly used. Actually, 'regional airports' comprise of airports not serving (or at least not primarily serving) large cities (e.g., Cork Airport in Ireland, Valladolid Airport in Spain, or Ashville and Tallahassee in the US). In contrast, 'secondary airports' relate to 'smaller' airports within multiple-airport cities (e.g., London Stansted Airport in the UK, Rome Ciampino Airport in Italy and Houston Hobby Airport in the US).

Having said that, nearly all authors on the subject have highlighted the LCCs' dramatic use of regional and/or secondary airports. It is commonly stated that regional/secondary airports are a key part of the LCC model (e.g., Button et al., 2010; Williams, 2011; Vasigh et al., 2013). This is obviously partly true, but the lack of any quantification means that the share of LCC services serving these airports is unknown. Other authors are more balanced and acknowledge that there are various LCC network models, notably in terms of airports and routes served. For instance, Graham (2009) analyses six LCC network structures. He shows significant diversity in terms of number of airports served, connections per airport and use of secondary/regional airports. Considering the latter, there is a contrast between Ryanair, which mostly serves secondary/regional airports, and the five other LCCs that neglect them. Dobruszkes (2013) builds a typology of European LCC networks, notably based on the share of exclusive routes (namely, airport-pairs operated without any competitors). Such routes are testimony of the use of regional airports, because these airports serve smaller cities; as a result, market size is smaller too and there is less room for competition. The gap between Ryanair and other airlines, including Easyjet, is confirmed. Furthermore, between 2004 and 2012, both Ryanair and Easyjet moved towards less dense routes (that is, less seats per route), more exclusive routes and less concentrated networks, even though a clear gap between the two airlines remains (namely, Easyjet operates denser routes, its network is more concentrated, there are less exclusive routes, and thus the airline faces more head-on competition with other airlines thanks to the significant use of traditional, large airports). More generally, many publications highlight that American and European LCCs operate less concentrated, point-to-point networks with nodes serving as bases instead of as transfer points (e.g., Reynolds-Feighan, 2010; Graham and Shaw, 2008).

The success of regional and secondary airports reflects the move of small airports towards entrepreneurial management aiming to attract airlines with lower charges and available capacity (Francis et al., 2003, 2004; Gillen and Lall, 2004). Political and financial support from local authorities often goes along with such strategies, or is even induced by them (Barbot, 2006; Papatheodorou and Lei, 2006; Bel, 2009; Laurino and Beria, 2014). In many cases, underused airports are seeking air services and thus have low bargaining power. The rationale for local authorities to support such developments is the creation of direct and indirect jobs (Dobruszkes, 2014).

The literature also comprises a series of case studies interested in the LCC-driven impacts on the local economy, especially on tourism. In most cases, only regional airports are considered (see, e.g., Donzelli, 2010; Lian and Denstadli, 2010; Pulina and Cortés-Jiménez, 2010; Rey et al., 2011). This is understandable considering that the effects are expected to be larger, at least in relative terms, in areas poorly served before the advent of LCC services. However, this reinforces the common assumption that LCCs primarily serve regional airports.

Some authors have nevertheless analysed how LCCs are accommodated at large, traditional airports (de Neufville, 2008; Hanaoka and Sarawati, 2011; Tchouamou Njoya and Niemeier, 2011; Graham, 2013). Some airports built dedicated terminals for the LCCs. Examples include T3 in Paris' CDG Airport and T5 in New York's JFK Airport. In addition, some large airports could dedicate to the LCCs their older terminal(s) freed by dominant network airlines that have moved to new facilities. Examples include Madrid and Milan Malpensa. Finally, several airports welcome LCCs without any dedicated facilities (e.g., Brussels). Such recent interest for LCCs serving large, traditional airports nevertheless does not include quantitative analysis.

Finally, several scholars have investigated recent trends in the LCC industry. de Wit and Zuidberg (2012) and Burghouwt and de Wit (2015) found that low-density route strategies limit the potential for further growth. As a result, LCCs such as Southwest Airlines and Ryanair have considered a new business model with significant implications for their network's geography. Namely, they now also serve main, traditional airports. Costs are inevitably higher, so fares are higher too, but are still often attractive. Ryanair's new model tends to get closer to the Easyjet model and involves more head-on competition with both network airlines and low-cost airlines such as Easyjet or Vueling (Burghouwt and de Wit, 2015). Fageda et al. (2015) analyse the network characteristics of LCCs using a hybrid approach (namely, fare bundling and/or connections between flights). Their econometric models suggest that hybrid models are related to the use of airports close to city centres (that is, city airports or main cities' traditional airports) and to serving traditional airlines' hub airports. Daft and Albers (2015) assessed the convergence between LCCs and network airlines in Europe based on 36 measurement items, including the share of flights at primary airports. They found LCCs had a tendency of moving towards the established network airlines' model. Finally, Malighetti et al. (2016) investigate base airports (airports where aircraft stand overnights and where some logistics activity can take place) downsized by LCCs worldwide. If complete abandonment is rare, downsizing is a significant process and recoveries are uncommon.

In short, it is now acknowledged that not all LCC services serve regional or secondary airports and that things are changing. However, quantifications based on comprehensive figures remain the exception. Furthermore, outdated perceptions of LCC networks persist. For instance, Berman (2015) compares Southwest Airlines with two other low-cost suppliers. As for airports, he only mentions secondary ones and concludes that the "avoidance of a direct frontal attack on key established competitors" is a key attribute of low-cost suppliers. It is thus time to clarify patterns with appropriate figures.