One price for all? The role of market captivity as a price discrimination device: evidence from the Italian city-pair markets.

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In the market for short-haul flights there are three sources of competition jointly affecting airline pricing behaviour: the intra-modal competition, the inter-modal competition and the competition of airline companies with themselves. The first source of competition regards the competition with other airlines for the same city-pair markets. The second one refers to the competition with other modes of transport such as trains, and especially with high-speed trains. The third one considers that airlines compete with themselves by setting different fares in different time periods prior to departure. This pricing strategy is known as inter-temporal price discrimination.

There is a large number of empirical contributions exploring pricing behaviour and competition in the air transport sector, in various geographical contexts. As far as concerns the intra-modal competition, there is plenty of evidence on the impact of intra-modal competition on fares. Past contributions provide evidence of a significant impact of market structure on fares (Borenstein, 1989; Gaggero and Piga, 2010; Brueckner et al., 2013) while a few of them claim that market structure influences frequencies rather than fares (Carlsson, 2004). Instead, relative few studies examined the impact of inter-modal competition on the airline operation (Jiménez and Betancor, 2012), market share (Behrens and Pels, 2012) and fares (Yang and Zhang, 2012). Finally, the IPD started to be explored with reference to commodities (Logfren, 1971; Stokey, 1979). Then, the research focuses also on the airline industry (Gale and Holmes, 1992,1993; Bachis and Piga, 2007; Alderighi and Piga, 2010; Gaggero and Piga, 2010; Bergantino and Capozza, 2014).

However, this paper differs from existing works as it attempts to study airline pricing for short-haul flights taking into account all the competitive forces acting in the market. Indeed, we measure the effect of intra-modal competition on fares and we shed light on the inter-temporal profile of fares to verify if airlines compete also with themselves by engaging in inter-temporal price discrimination.

The most relevant contribution of our work is to explore airline pricing when the extent of intermodal competition varies across routes. In other words, we want to understand if, and to what extent, airlines undertake different pricing strategies in captive markets, i.e. markets where there is often no alternative to air-transport. The aim is twofold: to measure differences between the average fare on city-pair with a different degree of inter-modal competition and to understand whether the competitive pressure exerted by the presence of rail competitors shapes the inter-temporal profile of
fares. The Italian passenger market is particularly fit to test the research question we posed, given the heterogeneity with respect to the inter-modal competition level. Indeed, Italy shows a very relevant regional gap in rail transport. First, high-speed rail (HSR) connections are effective in central and northern regions, while are scanty or even lacking in southern regions. This gap among regional areas further motivates our interest in developing an empirical analysis to understand whether airfares differs for markets with a more captive demand for airline services, that is whether airlines price discriminate according to the extent of inter-modal competition exerted by HRS. The dataset we use to address the research question is unique. It covers a sample of Italian domestic routes operated from January 2011 to December 2012. Data on fares were collected starting sixty days before the departure from airline website to replicate consumer behaviour when making reservations. The structure of the dataset allows to conduct a panel data analysis.

Our results confirm our initial hypothesis that airlines apply different fares for connections characterised by a different degree of intermodal competition: fares are higher when airlines faces very limited intermodal competition. Further, we find out that the inter-temporal profile of fares is non-monotonic. The level of rail-competition influences the shape of the profile: fares reach their minimum more in proximity of departure - thus the increasing part of the distribution is shorter - when there is effective high-speed rail competition. Therefore, the competition by rail transport influences pricing behaviour in terms of both average fares and inter-temporal dynamics. Important implications can be drawn from the results for investment policy and evaluation strategies for transportation infrastructures. High speed networks require relevant investments. Being able to identifying the indirect benefits of these investments through downward pressures on competing airline fares adds an important element to its cost-benefit analysis.

References


