

An Analysis of Airport Pricing and Regulation in the Presence of Competition Between Full Service Airlines and Low Cost Carriers

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Abstract

Despite the airport privatization and deregulation trend in recent years, whether or not the privatized or commercialized airports should be left unregulated is still an open question. Related to this issue, one question that has received a very little attention to date is if and how pricing behavior of unregulated airports affect downstream airline competition, especially the competition between airlines offering differentiated services such as the case of full service airlines (FSA) vis-à-vis low cost carriers (LCC). If the upstream monopoly (airport) hinders downstream (airline) competition, the welfare effects of the upstream unregulated monopoly may be much larger than initially suspected. This aspect of airport pricing has not been formally incorporated in the debate on airport price regulation.

In this paper, we study a duopoly model to capture the differential competitive effects of changing airport user charges on FSAs and LCCs. By making reasonable assumptions on differential price elasticities, unit costs and competitive behavior as manifested by firm-specific conduct parameters, we perform numerical simulations to measure differential effects on an FSA and an LCC of increasing airside user charge by an unregulated upstream monopolist airport.

Our analytical and numerical results suggest existence of the asymmetric effects of an airport's monopoly pricing on LCC and FSA. That is, LCCs suffer more from an identical cost increase than FSAs and are, therefore, more vulnerable to monopolistic pricing practices of an unregulated airport. This implies that unregulated airport pricing would reduce the extent of competition in downstream airline markets, and thus, cause a further detrimental effect on welfare over and above the first-order dead weight loss of airport's monopolistic pricing. Considering that LCCs have brought considerable reduction of average fares and the associated welfare gains, it is important for the governments to take into account of these asymmetric effects of increasing airport user charges on FSAs and LCCs when they consider the form and extent of regulation or deregulation.

Although our model and simulation work deal specifically with the effect of airport pricing on downstream airline markets, our framework of analysis may be applicable to analysis of any policy affecting costs of FSAs and LCCs including security levies as well as potentially adaptable to other upstream-downstream industry cases.

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