Analysis of Effects of Short Term Overcapacity on Airlines Competing on a Route

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Abstract

This paper provides a simple analysis of the effects of short term overcapacity on product and price decisions of two airlines competing on a single route. Overcapacity has been a frequent problem for airlines, mostly because of airlines' eagerness to expand capacity based on optimistic traffic forecasts and, on the other hand, vulnerability of air transportation to demand shocks initiated by political or economic events. The analysis in this paper shows that there is intense pressure for price competition when airlines have less flexibility to adjust capacity downwards in the short term. Signaling or punishment tactics are of limited value in enforcing cooperation between the airlines. This leads to an inferior equilibrium for airlines where each generates less revenue. Airline costs are important only for capacity decisions over a longer horizon, but have no effect on short term competition. In this study, we show that airlines can make a limited improvement on this equilibrium by product diversification and price differentiation.

Keywords: Overcapacity, product diversification, price differentiation

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