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Cooperative pricing in spatially differentiated markets

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1 Introduction

The literature contains a wide range of reasons why firms elect to cooperate strategically. Basically, the main reasons are similar to those of merging firms and differ with respect to their effects on prices and social welfare. On the one hand, cooperation can be associated with an increase in efficiency in case of increasing returns to scale and/or due to knowledge transfer such that marginal costs and prices decrease (*efficiency effect*). Cooperation can also be driven by firms' pursuit of quality enhancements in order to differentiate from competitors (*quality effect*).[1] On the other hand, cooperation may aim at increasing the market power of the firms involved (*market power effect*). The direction of the net effect depends on the size of these three countervailing effects. The stronger the market power and the quality effect, the higher the effect on equilibrium prices. Thus, since decades researchers and policy makers have focused on measuring market power in order to evaluate the impact of mergers or strategic alliances.

In markets with differentiated products the extent of the market power effect crucially depends on the locations in the market space of firms and products involved (Levy and Reitzes, 1992, Giraud-Heraud et al., 2003, and Pennerstorfer and Weiss, 2013). Thus, aggregated market concentration indices such as the Lerner Index or the Herfindahl-Hirschman Index only provide poor measures for local market power in such markets (Levy and Reitzes, 1992; Pinkse and Slade, 2004). As a result, structural models estimating demand systems have been employed to evaluate mergers or market power in differentiated markets (Baker and Bresnahan, 1985, Berry et al., 1995, Nevo, 2000, 2001, and Pinkse and Slade, 2004, among others). However, the dependency on output or demand data (as well as on time series) often raises problems in empirical studies (Kim and Singal, 1993; Pennerstorfer and Weiss, 2013) and

[1] This, for instance, has been the major argument for the antitrust immunity of strategic alliances in the airline industry (e.g. Brueckner and Whalen, 2000).