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Spatial price discrimination and the merger paradox

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Abstract

A familiar result in the literature on mergers is that the principal beneficiaries from such activity are the firms which are excluded from participation. The possible existence of this 'merger paradox' contrasts strongly with the frequently expressed view that merger is anti-competitive. This paper examines the question within the context of a model of spatial competition in which firms choose their locations in anticipation of forming a merger, and practise price-discrimination. We allow for differences in firms' shares in the benefits of merger, and for the possibility that the firms will attach probabilities to merger formation.

Keywords: Spatial competition; Price discrimination; Merger paradox

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1. Introduction

One of the robust insights afforded by traditional models of oligopolistic behaviour is that the principal beneficiaries from a merger are the non-participants.

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In the standard Cournot model,[1] for example, the parties to a merger exploit their increased market power by restricting output and raising price. But the consequence is that excluded firms *increase* their output to raise their own profits and, as Salant et al. (1983) have observed, this increase is generally sufficient to offset any profit gain by the merged entity.[2] The literature which has grown since the work of Salant et al. broadly reinforces their original conclusion (see Pepall et al., 1999, for an extensive treatment).

The theoretical findings which have emerged stand in marked contrast to the widely held perception that, in practice, mergers are anti-competitive (see Boyer, 1992, for a discussion). Indeed, as White (1988) has observed, the parties most likely to file suits intended to overturn mergers are those firms which are excluded from the process. Excluded rivals may legitimately fear that the merged firm will acquire the larger financial resources necessary for successful predation, in the form of 'dumping' or other types of underpricing, or for encroaching on established product lines. There may arise also the perception that competitors which are enlarged by merger may be in a position, through the use of potentially resource intensive pre-emptive tactics, to block the expansion of smaller rivals into other markets. In any case, given the conflict between theory and experience, the natural question is whether there can be found circumstances in which horizontal mergers can be simultaneously profitable for the participants (a requirement which must be satisfied if the merger is to take place), anti-competitive (the basis for the filing of a suit) and socially inefficient (a justification for government intervention). This paper addresses that question.

The approach we take is based upon a model of spatial competition in which firms practise price discrimination. The 'spatial' approach to the question of collusion and merger is not in itself new. Writers such as Jehiel (1992) and Friedman and Thisse (1993) have investigated differing degrees of collusion between spatially competitive firms, but on the assumption that customers pay transport costs (so-called f.o.b pricing). The work of Levy and Reitzes (1992) is similarly focused. Our justification for considering price discrimination is that, as several writers have noted (see, for instance, Thisse and Vives, 1988; Norman and Thisse, 1996), such pricing may be preferred by both customers and firms over f.o.b pricing. This difference between our approach and that of Jehiel and Friedman–Thisse, aside, the importance of their work is that it shows the extent to which location choices which are made in anticipation of the possibility of merger

[1] Or, more generally, in any model in which the firms' strategic variables are strategic substitutes.

[2] Pepall et al. (1999) refer to this phenomenon as the 'paradox of merger'. It should be noted, however, that this paradox does not invariably arise. In Gaudet and Salant (1992), for example, the authors observe that when the relevant variables are strategic complements the paradox is eliminated. See also Deneckere and Davidson (1985), whose results can be explained in this way. Other writers, such as Perry and Porter (1985), demonstrate that the paradox can be eliminated if the technological basis of Salant et al.'s model is changed.