

Referee report on “Endogenous technology sharing in R&D intensive industries”

This paper first considers endogenous formation of research joint venture (RJV) in a three-firm economy with initial cost asymmetries. Then it considers welfare implications and discusses the relevance of the results for antitrust policies. Finally, it provides case studies related to the theoretical analysis.

I find it an interesting paper. More particularly, I find that endogenous formation of RJV is an important contribution to the literature. However, I have few suggestions for improving the paper.

1. Instead of considering c , $2c$ and $3c$ as the initial marginal costs, I would prefer to see a framework where the firms have costs like c_1 , $c_2 = \alpha c_3$ and c_3 , where $\alpha \in [\frac{c_1}{c_3}, 1]$. This will help to capture relative asymmetry between the firms, and may have important implications for the antitrust policies.
2. There is a paper by Kabiraj and Mukherjee (2000, “Cooperation in R&D and production: a three firm analysis”, *Journal of Economics (Zeitschrift für Nationalökonomie)*, 71: 281-304), which consider the relationship between RJV and product market cooperation. In contrast to the present paper, where RJV choice is endogenous, Kabiraj and Mukherjee (2000) consider that the product market cooperation is an endogenous choice, while RJV can occur only between two innovating firms. I feel that the authors should cite that work, since these two papers nicely complement each other.

3. While citing the works on merger in a Cournot oligopoly, the authors should mention the important work by Salant et al. (1983, "Losses from horizontal merger: the effects of an exogenous change in industry structure on Cournot-Nash equilibrium", *Quarterly Journal of Economics*, 98: 185-99).
4. I think the introduction is too long. It may be better to have a literature review section, which is separate from the main introduction, which will mainly motivate the work and mention the main results.