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*Endogenous R and D Networks among Upstream Firms*


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**Abstract**

This paper studies the endogenous formation of R&D networks among upstream firms and the welfare implications thereof. Both under an upstream price setting and an upstream quantity setting, it is shown that the complete R&D network emerges in equilibrium but only if spillovers are sufficiently low. Yet, under a quantity setting, the complete network arises within a larger range of spillovers. In both cases, however, there is a potential conflict between private incentives for R&D collaboration and societal ones. We discuss policy measures that may help to steer firms towards a more socially desirable outcome. © 2016 John Wiley & Sons, Ltd.