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Persistence of Monopoly, Innovation, and R&D Spillovers* ,†

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Abstract

We build a dynamic duopoly model that accounts for the empirical observation of monopoly persistence in the long run. More specifically, we analyze the conditions under which it is optimal for the market leader to undertake pre-emptive R&D investment ("strategic predation" strategy) that eventually leads to exit of the follower firm. The follower is assumed to benefit from innovative activities of the leader through R&D spillovers. We show that strategic predation becomes an attractive strategy to embrace when the efficiency of R&D is high enough and when R&D spillovers are not large. The steady-state values of R&D investment in a dynamic model can be interpreted as the generalized values of the equilibrium values obtained in the corresponding static model. Finally, a distinct implication of our dynamic set-up is that it provides an explanation for the puzzling empirical findings, namely the presence of both negative (or not significant) and positive R&D spillovers from FDI in transition and emerging economies.

Keywords: dynamic duopoly, R&D spillovers, persistence of monopoly, strategic predation, accommodation
JEL Classification: L12, L13, L41

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