Persistence of Monopoly, Innovation, and R&D Spillovers: Static versus Dynamic Analysis

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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 in an initially duopoly setup to undertake pre-emptive R&D investment ("strategic predation") that eventually leads to the exit of the follower firm. The follower is assumed to benefit from the innovative activities of the leader through R&D spillovers. The novel feature of our approach is that we introduce an explicit dynamic model and contrast it with its static counterpart. Contrary to the predictions of the static model, strategic predation that leads to the persistence of monopoly is in general the optimal strategy to pursue in a dynamic framework when spillovers are not large.

Keywords: dynamic duopoly, R&D spillovers, persistence of monopoly, strategic predation, accommodation

JEL Classification: L12, L13, L41

\textsuperscript{a}CERGE-EI, a joint workplace of the Center for Economic Research and Graduate Education at Charles University in Prague, and the Economics Institute of the Czech Academy of Sciences. The authors are grateful to J. Engwerda, P. Katuscak, S. Slobodyan, participants of the CEF-2006 conference in Limassol and the EEA/EESM-2006 meeting in Vienna for helpful comments and suggestions, to L. Straková for English editing assistance, and to Z. Budinová and V. Strohush for research assistance on earlier drafts of the paper. The standard caveat applies.

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