Technological Leadership and Persistence of Monopoly under Endogenous Entry:
Static versus Dynamic Analysis*

EUGEN KOVÁČ a,b, VIATCHESLAV VINOGRAĐOV b,c
KREŠIMIR ŽIGIĆ b,d

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Abstract

We build a dynamic oligopoly model with endogenous entry in which a particular firm (leader) invests in an innovation process, facing the subsequent entry of other firms (followers). We identify conditions that make it optimal for the leader in the initial oligopoly situation to undertake pre-emptive R&D investment (strategic predation) eventually resulting in the elimination of all followers. Compared to a static model, the dynamic one provides new insights into the leader’s intertemporal investment choice, its optimal decision making, and the dynamics of the market structure over time. We also contrast the leader’s investment decisions with those of the social planner.

JEL Classification: L12, L13, L41

Keywords: dynamic oligopoly, endogenous entry, persistence of monopoly, strategic predation, accommodation

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aDepartment of Economics, University of Bonn, Germany; e-mail: eugen.kovac@uni-bonn.de; URL: www.uni-bonn.de/~kovac.

bCERGE-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.

cCorresponding author; address: CERGE-EI, P.O.Box 882, Politických vězňů 7, 11121 Prague 1, Czech Republic; e-mail: viatcheslav.vinogradov@cerge-ei.cz.

dE-mail: kresimir.zigic@cerge-ei.cz.