## Knowledge Licensing in a Model of R&D-Driven Endogenous Growth

Vahagn Jerbashian\*

## Abstract

I model knowledge (patent) licensing and evaluate intellectual property regulation in an endogenous growth framework where the engine of growth is in-house R&D performed by high-tech firms. I show that high-tech firms innovate more and economic growth is higher when there is knowledge licensing, and when intellectual property regulation facilitates excludability of knowledge, than when knowledge is not excludable and there are knowledge spillovers among high-tech firms. However, the number of high-tech firms is lower, and welfare is not necessarily higher, when there is knowledge licensing than when there are knowledge spillovers.

**Keywords**: Knowledge Licensing; In-house R&D; Intellectual Property Regulation; Endogenous Growth; Welfare

JEL classification: O31; O34; L16; L50; O41

<sup>\*</sup>Departament d'Economia and CREB, Universitat de Barcelona, and CERGE-EI. Correspondence address: Avenue Diagonal 696, 08034 Barcelona, Spain. E-mail: vahagn.jerbashian@ub.edu. Phone: +34934034890.

CERGE-EI, a joint workplace of Charles University in Prague and the Economics Institute of the Czech Academy of Sciences, Politickych veznu 7, P.O. Box 882, 111 21 Prague 1, Czech Republic.