

The Bright Side of Patents

by

Joan Farre-Mensa, Deepak Hegde, and Alexander Ljungqvist^{* †}

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ABSTRACT

Motivated by concerns that the patent system is hindering innovation, particularly for small inventors, this study investigates the bright side of patents. We examine whether patents help startups grow and succeed using detailed micro data on all patent applications filed by startups at the U.S. Patent and Trademark Office (USPTO) since 2001 and approved or rejected before 2014. We leverage the fact that patent applications are assigned quasi-randomly to USPTO examiners and instrument for the probability that an application is approved with individual examiners' historical approval rates. We find that patent approvals help startups create jobs, grow their sales, innovate, and reward their investors. Exogenous delays in the patent examination process significantly reduce firm growth, job creation, and innovation, even when a firm's patent application is eventually approved. Our results suggest that patents act as a catalyst that sets startups on a growth path by facilitating their access to capital. Proposals for patent reform should consider these benefits of patents alongside their potential costs.

Keywords: patents, innovation, R&D, entrepreneurship, venture capital

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† Address for correspondence: Harvard Business School, Rock 218, Boston MA 02163. Phone 617-495-6963. e-mail jfarremensa@hbs.edu (Farre-Mensa). New York University, Stern School of Business, Suite 722, 40 West Fourth Street, New York NY 10012-1126. Phone 212-998-0674. e-mail dhegde@stern.nyu.edu (Hegde). New York University, Stern School of Business, Suite 9-160, 44 West Fourth Street, New York NY 10012-1126. Phone 212-998-0304. e-mail al75@nyu.edu (Ljungqvist).