# NILS HAAKON LEHR

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#### **EDUCATION**

Ph.D., Economics, Boston University, Boston, MA, May 2023 (expected)

Dissertation Title: Essays on Innovation and Economic Growth

Dissertation Committee: Stephen Terry, Pascual Restrepo, Tarek Hassan, David Lagakos

M.S., Economics, Barcelona School of Economics, Barcelona, Spain, 2016

B.S., Economics, Humboldt University Berlin, Berlin, Germany, 2014

#### FIELDS OF INTEREST

Macroeconomics, Economic Growth

#### **PUBLICATIONS**

"Nonprofits in Good Times and Bad Times," (with Christine Exley and Stephen Terry)

Journal of Political Economy Microeconomics 1 (1), 42-79

#### WORKING PAPERS

- "R&D Return Dispersion and Economic Growth The Case of Inventor Market Power," January 2023.
- "Optimal Gradualism" (with Pascual Restrepo), December 2023.
- "Did R&D Misallocation Contribute to Slower Growth?," October 2022.
- "Innovation in an Aging Economy," February 2022.

### **WORK IN PROGRESS**

"Making An Impact — Inventor Preferences and R&D Externalities"

#### **PRESENTATIONS**

Society for Economic Dynamics Conference, June/July 2023

North American Summer Meeting of the Econometric Society, June 2023

American Economic Association, New Orleans, LA, 2023

European Winter Meeting of the Econometric Society, December 2022

17th Annual Economics Graduate Student Conference of Washington University in St. Louis, St. Louis, MO, October 2022

Green Line Macro Meeting, Boston, MA, 2022

Workshop on Entrepreneurial Finance and Innovation - Ph.D. Workshop, Online, 2021

ZEW International Conference on "The German Labor Market in a Globalized World: Trade,

Technology, and Demographics," Online, 2021

Green Line Macro Meeting, Boston, MA, 2020

#### FELLOWSHIPS AND AWARDS

Best Second Year Paper Award, Department of Economics, Boston University, 2019-2020

### WORK EXPERIENCE

RESEARCH ASSISTANCE

Professor Pascual Restrepo, Department of Economics, Boston University, 2018-2022 Professor Yuhei Miyauchi, Department of Economics, Boston University, 2020-2021

Professor Christine L. Exley, Negotiation, Organizations & Markets Unit, Harvard Business School, Summer 2020

Professor Stephen J. Terry, Department of Economics, Boston University, Winter 2019

#### PROFESSIONAL EXPERIENCE

Senior Associate, Economic Consulting, Deloitte LLP, London, UK, 2016-2017

### REFEREE EXPERIENCE

Management Science, Review of Economic Dynamics, Journal of Economic Behavior & Organization

#### **DEPARTMENTAL SERVICE**

Officer for Graduate Economic Association, Boston University, 2019-2020 Co-organizer of Macro (Summer) Reading Group, 2019-2022

#### **TEACHING EXPERIENCE**

Teaching Assistant, EC704: Advanced Macroeconomics, Department of Economics, Boston University, Spring 2019

Teaching Assistant, EC 102: Macroeconomics, Department of Economics, Boston University, Winter 2018

## LANGUAGES

Fluent in English and German. Intermediate Spanish.

COMPUTER SKILLS: MATLAB, STATA, R, Fortran, LaTeX

CITIZENSHIP/VISA STATUS: Germany/F1

#### REFERENCES

Professor Stephen J. Terry

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**Professor Pascual** Restrepo

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# NILS HAAKON LEHR

## R&D Return Dispersion and Economic Growth - The Case of Inventor Market Power

This paper documents large and persistent differences in R&D returns across listed US firms, with firms at the 75th percentile earning twice the median return. Furthermore, returns are consistently larger for highly innovative firms with a large inventor workforce. Systematic R&D return differences are surprising as workhorse endogenous growth models predict that R&D resources flow from low to high returns firms until return equalization. I show that R&D return dispersion can reflect heterogeneity in firms' market power over inventors in theory and provide evidence in favor of this hypothesis. I estimate that firms with high returns and those with a large R&D workforce face less elastic inventor supply, suggesting they have more inventor market power. Calibrating a Schumpeterian growth model to match this evidence, I find that inventor monopsony can account for 1/3 of the documented R&D return dispersion and slows growth by 4%, a welfare reduction of 2.1%.

## **Optimal Gradualism**

(with Pascual Restrepo)

This paper studies how gradualism affects the welfare gains from trade, technology, and reforms. When people face adjustment frictions, gradual shocks create less adverse distributional effects in the short run. We provide formulas to quantify the distributional gains from gradualism. We also derive formulas for optimal short-run taxes on trade and technology and show that there are welfare gains from inducing a more gradual transition via temporary distortions. These formulas can be used to compute the optimal timing of economic reforms or trade liberalizations. Using these formulas, we compute the welfare gains from gradualism and the optimal temporary taxes needed to mitigate the distributional consequences of rising import competition from China and the deployment of automation technologies substituting for routine jobs. We also use our formulas to study Colombia's trade liberalization in 1990 and show that optimal policy called for more gradual reform.

### **Nonprofits in Good Times and Bad Times**

(with Christine L. Exley and Stephen J. Terry)

Need fluctuates over the business cycle. We conduct a survey revealing a desire for nonprofit activities to countercyclically expand during downturns. We then demonstrate, using comprehensive US nonprofit data drawn from millions of tax returns, that the public's hopes are disappointed. Nonprofit expenditure, revenue, and balance sheets fluctuate procyclically: contracting during national and local downturns. This finding is evident even for a narrow group of nonprofits that the public most wishes would expand during downturns, for example, those providing critical needs such as food or housing. Our new facts contribute to the charitable giving, nonprofit, and business cycle literatures.