NILS HAAKON LEHR

375 Market St, Apt. 306
Boston Massachusetts 02135 USA
Mobile: (617) 417-4235
Email: nilslehr@bu.edu
Website: https://nilslehr.com

EDUCATION

Ph.D., Economics, Boston University, Boston, MA, May 2023
Dissertation Title: *Essays on Innovation and Economic Growth*
Dissertation Committee: Stephen Terry, Pascual Restrepo, Tarek Hassan
Chair: 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, Innovation, Entrepreneurship, Economic Growth, Firm Dynamics

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

"Did R&D Misallocation Contribute to Slower Growth?," October 2023.
"Innovation in an Aging Economy," October 2023, *submitted.*
"Optimal Gradualism" (with Pascual Restrepo), June 2023, *submitted*.
"Does Monopsony Matter for Innovation?," February 2023

WORK IN PROGRESS

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

PRESENTATIONS

2023: Society for Economic Dynamics Conference; North American Summer Meeting of the Econometric Society; American Economic Association Meetings; University of Toronto, Rotman School of Business–EAP; Imperial College London, Economics; Center for Research in International Economics (CREI) and Universitat Pompeu Fabra; Dartmouth College, Tuck School of Business–Finance; Duke University, Fuqua School of Business–Finance.
2022: European Winter Meeting of the Econometric Society; 17th Annual Economics Graduate Student Conference of Washington University in St. Louis; Green Line Macro Meeting.
2021: Workshop on Entrepreneurial Finance and Innovation - Ph.D. Workshop; ZEW International Conference on "The German Labor Market in a Globalized World: Trade, Technology, and Demographics."
2020: Green Line Macro Meeting.

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

Associate, Economics Practice, Cornerstone Research, Boston, US, 2023-
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
Department of Economics
Boston University
Phone: (617) 353-4455
Email: stephent@bu.edu

Professor Pascual Restrepo
Department of Economics
Boston University
Phone: (617) 353-6824
Email: pascual@bu.edu

Professor Tarek A. Hassan
Department of Economics
Boston University
Phone: (617) 353-7082
Email: thassan@bu.edu

October 2023

NILS HAAKON LEHR

Did R&D Misallocation Contribute to Slower Growth?

This paper provides evidence that rising frictions and their impact on the allocation of R&D resources have contributed to the slowdown in US productivity growth in recent decades. I develop a growth accounting framework allowing for rich firm heterogeneity in R&D productivity, exposure to frictions, as captured by an R&D wedge, and the rate at which private value created from innovation translates into growth. The model growth rate permits a closed-form decomposition into the frictionless level and an adjustment factor capturing the impact of frictions. I propose a methodology to measure the model primitives for a sample of US-listed firms from 1975 to 2014. Frictions can be measured using the R&D return, i.e., the ratio of value created from R&D to its cost, which I measure as the ratio of patent valuations to R&D expenditure over a 5-year window. I document large and persistent differences therein, which suggests significant frictions through the lens of the model. The evidence suggests financial frictions, adjustment costs, and monopsony power over inventors as potential drivers of R&D return dispersion. Combining model and data, I estimate that frictions reduce economic growth by 18% on average and that their rise can account for 11% slower growth in 2000–14 or 30% of the overall observed slowdown. These findings are robust to a large set of alternative specifications and measurement error adjustments.

Optimal Gradualism
(with Pascual Restrepo)

This paper studies how gradualism affects the welfare gains from trade, technology, and reforms. When workers face adjustment frictions, gradual shocks create less adverse distributional effects in the short run. We show that there are welfare gains from inducing a more gradual transition via temporary taxes on trade and technology and provide formulas for the optimal path for taxes. Our formulas account for the possibility that reallocation effort responds to policy and for the existence of income taxes and assistance programs. Using these formulas, we compute 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. Our formulas can also be used to compute the optimal timing of economic reforms or trade liberalizations. We study Colombia's trade liberalization in 1990 and conclude that optimal policy called for a 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.