

Nicolas Fernandez-Arias

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Office Contact Information

Department of Economics
Julis Romo Rabinowitz Building
Princeton University
Princeton, NJ 08544

Graduate Studies

Princeton University *2014-present*

Ph.D. Candidate in Economics

Dissertation: “Essays on Innovation and Endogenous Growth”

Expected Completion Date: June 2021

REFERENCES

Professor Esteban Rossi-Hansberg
Department of Economics
Princeton University
609-258-4024
ecrossi@princeton.edu

Professor Richard Rogerson
Department of Economics
Princeton University
609-258-4839
rdr@princeton.edu

Professor Gianluca Violante
Department of Economics
Princeton University
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Prior Education

Princeton University *2008-2012*

A.B. in Mathematics

Research Fields

PRIMARY Macroeconomics, Growth, Innovation

SECONDARY Finance

Job Market Paper

“Endogenous Growth with Employee Spinouts, Noncompetes, and Creative Destruction”

I study the effect of noncompete agreements (NCAs) on aggregate productivity growth. I first construct a dataset matching venture capital funded startups to the previous employers of their founders. I find a statistically significant relationship between corporate R&D and subsequent

employee startup formation in the same industry (within-industry spinouts). The relationship is economically significant, accounting for approximately 8.5% of startup employment in the data. Motivated by this finding, I develop a general equilibrium model extending a standard quality ladders model of endogenous growth to include R&D-induced within-industry spinouts and noncompete agreements. NCAs increase the incentive for R&D by incumbent firms while also stifling innovation by within-industry spinouts. According to the quantified model, reducing all barriers to the use of NCAs increases the annual growth rate by 0.21 percentage points and welfare by 3.24% in consumption-equivalent terms. It does so by improving the allocation of R&D labor, which in equilibrium is inefficiently overallocated to creative destruction due to business stealing and congestion externalities. Untargeted R&D subsidies reduce growth and welfare by exacerbating the misallocation of R&D. R&D subsidies targeted at own-product innovation can substitute for enforcement of NCAs without stifling spinout innovation. The growth-maximizing policy is a combination of targeted R&D subsidies of 88% and a ban on the use of NCAs. When targeted R&D subsidies are lower than 62%, eliminating barriers to NCAs maximizes growth.

Work in Progress

“Population Aging, Vintage Human Capital, and Economic Growth”

“Employee Spinouts and the Inverted-U Relationship between Competition and Innovation”

“Latin American Growth Shortfall: Productivity and Inequality” (with Eduardo Fernandez-Arias)

Research Experience and Other Employment

2015 Princeton University, Research Assistant to Juan Pablo Xandri

2014 Brookings Institution, Research Assistant for Guillermo Vuletin

2012-13 Bridgewater Associates, Investment Associate

Teaching

ECO 981: Junior Independent Work Advising (TA, Fall 2020)

FIN 502: Corporate Finance and Financial Accounting (TA, Spring 2020)

ECO 500: PhD Economics Math Camp (TA, Summer 2019)

ECO 310: Macroeconomic Theory: A Mathematical Approach (TA, Spring 2019)

ECO 461/FIN 581: Entrepreneurship, Innovation, and Venture Capital (TA, Spring 2018)

ECO 468/FIN 568: Behavioral Finance (TA, Spring 2018 and 2017)

ECO 362: Financial Investments (TA, Fall 2017 and 2016)

TEACHING REFERENCES

Professor Martin Cherkas
609-903-8797
cherkes@princeton.edu

Professor Gianluca Violante
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Conference Presentations

- 2020 Economics Graduate Student Conference (Washington University in St. Louis)
2020 Young Economists Symposium (Columbia, NYU, UPenn, Princeton, Yale)
2019 Wharton Innovation Doctoral Symposium (University of Pennsylvania)

Honors, Scholarships, and Fellowships

- Graduate Economics Fellowship, Princeton University *2014–2020*
Louis Rukeyser Thesis Research Grant, Princeton University *2011*

Languages

English (native), Spanish (native), French (proficient)